

\$%^STN;HighlightOn= \*\*\*;HighlightOff=\*\*\* ;

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TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 1 Web Page URLs for STN Seminar Schedule - N. America  
NEWS 2 "Ask CAS" for self-help around the clock  
NEWS 3 FEB 27 New STN AnaVist pricing effective March 1, 2006  
NEWS 4 APR 04 STN AnaVist \$500 visualization usage credit offered  
NEWS 5 MAY 10 CA/CAPLUS enhanced with 1900-1906 U.S. patent records  
NEWS 6 MAY 11 KOREAPAT updates resume  
NEWS 7 MAY 19 Derwent World Patents Index to be reloaded and enhanced  
NEWS 8 MAY 30 IPC 8 Rolled-up Core codes added to CA/CAPLUS and  
USPATFULL/USPAT2  
NEWS 9 MAY 30 The F-Term thesaurus is now available in CA/CAPLUS  
NEWS 10 JUN 02 The first reclassification of IPC codes now complete in  
INPADOC  
NEWS 11 JUN 26 TULSA/TULSA2 reloaded and enhanced with new search and  
and display fields  
NEWS 12 JUN 28 Price changes in full-text patent databases EPFULL and PCTFULL  
  
NEWS EXPRESS JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
AND CURRENT DISCOVER FILE IS DATED 26 JUNE 2006.  
  
NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items  
NEWS IPC8 For general information regarding STN implementation of IPC 8  
NEWS X25 X.25 communication option no longer available

Enter NEWS followed by the item number or name to see news on that  
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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 08:38:26 ON 05 JUL 2006

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 08:38:40 ON 05 JUL 2006

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STRUCTURE FILE UPDATES: 4 JUL 2006 HIGHEST RN 890521-76-3  
DICTIONARY FILE UPDATES: 4 JUL 2006 HIGHEST RN 890521-76-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

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\*\*\*\*\*  
\*  
\* The CA roles and document type information have been removed from \*  
\* the IDE default display format and the ED field has been added, \*  
\* effective March 20, 2005. A new display format, IDERL, is now \*  
\* available and contains the CA role and document type information. \*  
\*  
\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS  
for details.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/ONLINE/UG/regprops.html>

=>

Uploading c:\program files\stnexp\queries\10755147fullstructure.str

L1 STRUCTURE UPLOADED

=>

Uploading c:\program files\stnexp\queries\10755147halfstructure.str

L2 STRUCTURE UPLOADED

=> s l1 sss full

FULL SEARCH INITIATED 08:39:30 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 769 TO ITERATE

100.0% PROCESSED 769 ITERATIONS 16 ANSWERS  
SEARCH TIME: 00.00.01

L3 16 SEA SSS FUL L1

=> s l2 sss full

FULL SEARCH INITIATED 08:39:36 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 1636 TO ITERATE

100.0% PROCESSED 1636 ITERATIONS 18 ANSWERS  
SEARCH TIME: 00.00.01

L4 18 SEA SSS FUL L2

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	333.88	334.09

FILE 'CAPLUS' ENTERED AT 08:39:50 ON 05 JUL 2006  
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FILE COVERS 1907 - 5 Jul 2006 VOL 145 ISS 2  
FILE LAST UPDATED: 4 Jul 2006 (20060704/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s 13  
L5 1 L3

=> d all

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2004:589117 CAPLUS <<LOGINID::20060705>>  
DN 141:148178  
ED Entered STN: 23 Jul 2004  
TI Optical recording medium dye and optical recording medium using thereof  
IN Kuo, Chao-Nan; Hu, Mei-Jung  
PA Taiwan  
SO U.S. Pat. Appl. Publ., 8 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
IC ICM G11B007-24  
INCL 430270210; 430270200; 430945000; 428064800  
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004142278	A1	20040722	US 2004-755147	20040109
PRAI	TW 2003-92100471	A	20030110		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004142278	ICM	G11B007-24
	INCL	430270210; 430270200; 430945000; 428064800
	IPCI	G11B0007-24 [ICM,7]
	IPCR	G11B0007-24 [I,A]; G11B0007-24 [I,C*]
	NCL	430/270.210
	ECLA	G11B007/247

OS MARPAT 141:148178  
GI

/ Structure 1 in file .gra /

AB An optical recording medium dye is disclosed. The optical recording medium dye comprises the following chem. structure I (A, B = H, halogen, nitrogen-contg. group, alkoxyl group; R1,2 = alkyl group, alkenyl group, aralkyl group, alkoxycarbonyl group, alkoxycarboxyl group, alkoxyl group, alkyl hydroxyl group, alkylamino group, alkylcarbamoyle group, alkylsulfamoyl group, alkylalkoxyl group, alkyl halide group, alkylsulfonyl group, alkylcarboxyl group; and X - = an anion).

ST optical recording medium cyanine dye

IT Cyanine dyes

Optical disks

Optical recording materials

(optical recording medium contg. cyanine dye)

IT \*\*\*726185-74-6P\*\*\* \*\*\*726185-78-0P\*\*\*

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(optical recording medium contg. cyanine dye)  
IT 189189-12-6 \*\*\*726185-79-1\*\*\* \*\*\*726185-81-5\*\*\*  
\*\*\*726185-82-6\*\*\* \*\*\*726185-84-8\*\*\* \*\*\*726185-86-0\*\*\*  
\*\*\*726185-88-2\*\*\* \*\*\*726185-90-6\*\*\*  
RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)  
(optical recording medium contg. cyanine dye)  
IT 17084-13-8, Potassium hexafluorophosphate 726185-72-4 726185-75-7  
726185-76-8  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(optical recording medium contg. cyanine dye)

=> s 14  
L6 2 L4

=> d all 1-2

L6 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2004:589117 CAPLUS <<LOGINID::20060705>>  
DN 141:148178  
ED Entered STN: 23 Jul 2004  
TI Optical recording medium dye and optical recording medium using thereof  
IN Kuo, Chao-Nan; Hu, Mei-Jung  
PA Taiwan  
SO U.S. Pat. Appl. Publ., 8 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
IC ICM G11B007-24  
INCL 430270210; 430270200; 430945000; 428064800  
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other  
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004142278	A1	20040722	US 2004-755147	20040109
PRAI	TW 2003-92100471	A	20030110		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004142278	ICM	G11B007-24
	INCL	430270210; 430270200; 430945000; 428064800
	IPCI	G11B0007-24 [ICM,7]
	IPCR	G11B0007-24 [I,A]; G11B0007-24 [I,C*]
	NCL	430/270.210
	ECLA	G11B007/247

OS MARPAT 141:148178  
GI

/ Structure 2 in file .gra /

AB An optical recording medium dye is disclosed. The optical recording medium dye comprises the following chem. structure I (A, B = H, halogen, nitrogen-contg. group, alkoxyl group; R1,2 = alkyl group, alkenyl group, aralkyl group, alkoxycarbonyl group, alkoxycarboxyl group, alkoxyl group, alkyl hydroxyl group, alkylamino group, alkylcarbamoyle group, alkylsulfamoyl group, alkylalkoxyl group, alkyl halide group, alkylsulfonyl group, alkylcarboxyl group; and X - = an anion).

ST optical recording medium cyanine dye

IT Cyanine dyes

Optical disks

Optical recording materials

(optical recording medium contg. cyanine dye)

IT \*\*\*726185-74-6P\*\*\* \*\*\*726185-78-0P\*\*\*

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(optical recording medium contg. cyanine dye)

IT 189189-12-6 \*\*\*726185-79-1\*\*\* \*\*\*726185-81-5\*\*\*  
\*\*\*726185-82-6\*\*\* \*\*\*726185-84-8\*\*\* \*\*\*726185-86-0\*\*\*

\*\*\*726185-88-2\*\*\*      \*\*\*726185-90-6\*\*\*

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(optical recording medium contg. cyanine dye)

IT 17084-13-8, Potassium hexafluorophosphate 726185-72-4 726185-75-7  
726185-76-8

RL: RCT (Reactant); RACT (Reactant or reagent)  
(optical recording medium contg. cyanine dye)

L6 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:672943 CAPLUS <<LOGINID::20060705>>

DN 133:268230

ED Entered STN: 26 Sep 2000

TI Benzoindolenine-type cyanine dyes for optical recording materials

IN Usami, Takashi; Asanuma, Naoki; Yamakawa, Kazuyoshi

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C09B023-00

ICS B41M005-26; G11B007-24

CC 41-11 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

Section cross-reference(s): 27, 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000265076	A2	20000926	JP 1999-65966	19990312
PRAI	JP 1999-65966		19990312		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2000265076	ICM	C09B023-00
	ICS	B41M005-26; G11B007-24
	IPCI	C09B0023-00 [ICM,7]; B41M0005-26 [ICS,7]; G11B0007-24 [ICS,7]
	IPCR	C09B0023-00 [I,C*]; C09B0023-08 [I,A]
	ECLA	C09B023/08B

OS MARPAT 133:268230

GI

/ Structure 3 in file .gra /

AB The dyes I [R1 = (C1-12 alkoxy-substituted) C1-12 alkyl; R2, R3 = H, C1-12 alkyl, C1-12 alkoxy, halo; R4 = H, C1-12 alkyl, halo, pyridyl; X- = Cl-, Br-, I-, ClO4-, PF6-, BF4-, CF3SO3-, p-toluenesulfonate, naphthalenedisulfonate] are esp. useful for manuf. of laser optical disks with good recording characteristics. Thus, I (R1 = n-Bu; R2, R4 = H; R3 = OMe; X- = ClO4-) was prepd. and used for manuf. of optical disks showing good C/N ratio and high sensitivity.

ST laser optical disk cyanine dye; benzoindolenine cyanine dye optical recording material

IT Cyanine dyes

Optical recording materials

(benzoindolenine-type cyanine dyes for optical recording materials)

IT Optical disks

(laser; benzoindolenine-type cyanine dyes for optical recording materials)

IT 297172-63-5P \*\*\*297172-65-7P\*\*\*

RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(benzoindolenine-type cyanine dyes for optical recording materials)

IT 260058-68-2P 297172-66-8P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(benzoindolenine-type cyanine dyes for optical recording materials)

IT 5111-65-9, 2-Bromo-6-methoxynaphthalene 5350-57-2, Benzophenone hydrazone

RL: RCT (Reactant); RACT (Reactant or reagent)

=> d his

(FILE 'HOME' ENTERED AT 08:38:26 ON 05 JUL 2006)

FILE 'REGISTRY' ENTERED AT 08:38:40 ON 05 JUL 2006

L1 STRUCTURE UPLOADED  
L2 STRUCTURE UPLOADED  
L3 16 S L1 SSS FULL  
L4 18 S L2 SSS FULL

FILE 'CAPLUS' ENTERED AT 08:39:50 ON 05 JUL 2006

L5 1 S L3  
L6 2 S L4

=> log y

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
9.67	343.76

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-2.25	-2.25

CA SUBSCRIBER PRICE

STN INTERNATIONAL LOGOFF AT 08:40:27 ON 05 JUL 2006

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PASSWORD:

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NEWS 10 JUN 02 The first reclassification of IPC codes now complete in  
INPADOC  
NEWS 11 JUN 26 TULSA/TULSA2 reloaded and enhanced with new search and  
and display fields  
NEWS 12 JUN 28 Price changes in full-text patent databases EPFULL and PCTFULL  
  
NEWS EXPRESS JUNE 30 CURRENT WINDOWS VERSION IS V8.01b, CURRENT  
MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),  
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NEWS LOGIN Welcome Banner and News Items  
NEWS IPC8 For general information regarding STN implementation of IPC 8  
NEWS X25 X.25 communication option no longer available

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\* Eastern Daylight Time. \*  
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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 08:21:49 ON 05 JUL 2006

=> file reg

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.21

0.21

FILE 'REGISTRY' ENTERED AT 08:22:02 ON 05 JUL 2006

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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	2.41	3.06

FILE 'REGISTRY' ENTERED AT 08:23:22 ON 05 JUL 2006  
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STRUCTURE FILE UPDATES: 4 JUL 2006 HIGHEST RN 890521-76-3  
 DICTIONARY FILE UPDATES: 4 JUL 2006 HIGHEST RN 890521-76-3

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\*\*\*\*\*  
 \*  
 \* The CA roles and document type information have been removed from \*  
 \* the IDE default display format and the ED field has been added, \*  
 \* effective March 20, 2005. A new display format, IDERL, is now \*  
 \* available and contains the CA role and document type information. \*  
 \*  
 \*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMITS  
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=> tra rn l1  
 'L1' HAS NO ANSWERS

=> tra rn l3  
 L4 TRANSFER L3 1- RN : 14 TERMS  
 L5 14 L4

=> file caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.44	15.25

FILE 'CAPLUS' ENTERED AT 08:23:42 ON 05 JUL 2006  
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=> s 15  
L6

738 L5

=> s (optical or laser or information) (5a) (med? or disk? or disc? or card?)  
889435 OPTICAL  
19 OPTICALS  
889443 OPTICAL  
(OPTICAL OR OPTICALS)  
526858 LASER  
162993 LASERS  
540405 LASER  
(LASER OR LASERS)  
411012 INFORMATION  
3065 INFORMATIONS  
413456 INFORMATION  
(INFORMATION OR INFORMATIONS)  
1920654 MED?  
154914 DISK?  
2995576 DISC?  
260343 CARD?  
L7 87270 (OPTICAL OR LASER OR INFORMATION) (5A) (MED? OR DISK? OR DISC? OR  
CARD?)

=> s 16 and 17  
L8 23 L6 AND L7

=> d all 1-23

L8 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2006:511020 CAPLUS <<LOGINID::20060705>>  
DN 145:17848  
ED Entered STN: 01 Jun 2006  
TI Cyanine compound, optical recording material utilizing the compound, and  
\*\*\*optical\*\*\* recording \*\*\*medium\*\*\* for high-speed recording  
IN Okada, Mitsuhiro; Yano, Toru; Shigeno, Koichi  
PA Asahi Denka Co., Ltd., Japan  
SO PCT Int. Appl., 29 pp.  
CODEN: PIXXD2  
DT Patent  
LA Japanese  
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other  
Reprographic Processes)  
Section cross-reference(s): 28

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006057113	A1	20060601	WO 2005-JP18852	20051013
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	JP 2006151823	A2	20060615	JP 2004-340485	20041125
PRAI	JP 2004-340485	A	20041125		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
------------	-------	------------------------------------

WO 2006057113 IPCI C07D0413-06 [I,A]; C07D0413-00 [I,C\*]; C07D0417-06  
[I,A]; C07D0417-00 [I,C\*]; B41M0005-26 [I,A];  
G11B0007-244 [I,A]; G11B0007-24 [I,C\*]  
JP 2006151823 IPCI C07D0413-06 [I,A]; C07D0413-00 [I,C\*]; C07D0417-06  
[I,A]; C07D0417-00 [I,C\*]; C09B0023-00 [I,A];  
G11B0007-244 [I,A]; G11B0007-24 [I,C\*]; B41M0005-26  
[I,A]  
FTERM 2H111/EA03; 2H111/EA22; 2H111/EA25; 2H111/EA33;  
2H111/FB43; 4C063/AA01; 4C063/BB03; 4C063/CC52;  
4C063/CC62; 4C063/DD08; 4C063/EE10; 4H056/CA01;  
4H056/CC02; 4H056/CC08; 4H056/CE03; 4H056/CE06;  
4H056/DD02; 4H056/DD19; 4H056/DD23; 4H056/FA03;  
4H056/FA05; 4H056/FA06; 5D029/JA04

GI

/ Structure 1 in file .gra /

AB A cyanine compd. of the following general formula I (A, B = benzene ring,  
naphthalene ring; R1, R2 = C1-4-alkyl, benzyl; X = O, S, NY; Y, Y1, Y2 =  
H, C1-30-org. group; Z = H, halo, cyano group; Anm- = m-valent anion; m =  
1, 2; p = coeff. for maintaining charge neutrality) that is suitable to an  
optical recording material for use as in a recording layer of an  
\*\*\*optical\*\*\* recording \*\*\*medium\*\*\* capable of \*\*\*laser\*\*\* beam  
recording and reprodn. This cyanine compd. exhibits appropriate pyrolytic  
behavior for realizing esp. sensitivity capable of coping with high-speed  
recording.

ST cyanine compd \*\*\*optical\*\*\* recording material rewritable \*\*\*disk\*\*\*  
IT Erasable \*\*\*optical\*\*\* \*\*\*disks\*\*\*  
(DVD-R; cyanine compd., \*\*\*optical\*\*\* recording material utilizing  
the compd., and \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* for  
high-speed recording)

IT Optical recording materials  
(cyanine compd., optical recording material utilizing the compd., and  
\*\*\*optical\*\*\* recording \*\*\*medium\*\*\* for high-speed recording)

IT 888224-57-5P 888224-60-0P  
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic  
preparation); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)  
(prepn. of cyanine compd. as optical recording material for DVD-R  
recording medium for high-speed recording)

IT 204774-31-2P  
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);  
RACT (Reactant or reagent)  
(prepn. of cyanine compd. as optical recording material for DVD-R  
recording medium for high-speed recording)

IT 120-75-2 778-28-9 5260-37-7 \*\*\*17084-13-8\*\*\* , Potassium  
hexafluorophosphate 888224-62-2  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of cyanine compd. as optical recording material for DVD-R  
recording medium for high-speed recording)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Asahi Denka Kogyo Kabushiki Kaisha; CN 1438639 A 2003 CAPLUS
- (2) Asahi Denka Kogyo Kabushiki Kaisha; KR 2003068414 A 2003
- (3) Asahi Denka Kogyo Kabushiki Kaisha; JP 2003231359 A 2003 CAPLUS
- (4) Asahi Denka Kogyo Kabushiki Kaisha; JP 3659922 B2 2003 CAPLUS
- (5) Mason, S; Organic Letters 2002, V4(24), P4261 CAPLUS
- (6) Raitoku Kagi Kofun Yugen Koshi; JP 2001192579 A 2001 CAPLUS
- (7) Ricoh Co Ltd; JP 2004216817 A 2004 CAPLUS

L8 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2006:411814 CAPLUS <<LOGINID::20060705>>

DN 144:442708

ED Entered STN: 05 May 2006

TI Indolium compounds and optical recording materials

IN Yano, Toru; Shigeno, Koichi

PA Asahi Denka Co., Ltd., Japan

SO PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DT Patent

LA Japanese  
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other  
Reprographic Processes)

FAN.CNT.1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006046374	A1	20060504	WO 2005-JP17376	20050921
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	JP 2006124542	A2	20060518	JP 2004-315678	20041029
PRAI	JP 2004-315678	A	20041029		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2006046374	IPCI	C09B0023-00 [I,A]; B41M0005-26 [I,A]; G11B0007-244 [I,A]; G11B0007-24 [I,C*]
JP 2006124542	IPCI	C09B0023-00 [I,A]; G11B0007-244 [I,A]; G11B0007-24 [I,C*]
	FTERM	4H056/CA02; 4H056/CC02; 4H056/CE02; 4H056/CE03; 4H056/CE06; 4H056/CE07; 4H056/DD03; 5D029/JA04; 5D029/JB21

GI

/ Structure 2 in file .gra /

AB Indolium compds. represented by the general formula I (A = benzene,  
naphthalene; Z = C1-8-alkyl; R1, R2 = C1-30-org. group, II, III; X =  
C1-8-alkyl; Y1 = H, C1-30-org. group; n = 0-4; q = 0-4; Anm- = m-valent  
anion; m = 1, 2; p = coeff. for keeping the elec. charge neutral) which  
exhibit thermal decompn. behavior more suitable for the optical recording  
material to be used in \*\*\*optical\*\*\* recording layers of  
\*\*\*optical\*\*\* recording \*\*\*media\*\*\* for high-speed recording.  
Indolium compds. are synthesized.

ST indolium compd synthesis optical recording material

IT Optical recording materials

(indolium compds. suitable for optical recording materials)

IT 884862-94-6P 884862-96-8P 884862-98-0P 884863-00-7P 884863-01-8P  
884863-03-0P 884863-10-9P

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or  
engineered material use); PREP (Preparation); USES (Uses)

(indolium compds. suitable for optical recording materials)

IT 120-21-8, 4-Diethylaminobenzaldehyde 7791-07-3, Sodium perchlorate  
monohydrate 13755-29-8, Sodium tetrafluoroborate \*\*\*17084-13-8\*\*\* ,  
Potassium hexafluorophosphate 17754-90-4, 4-Diethylaminosalicylaldehyde  
33985-71-6 843673-97-2 884863-04-1 884863-05-2 884863-06-3  
884863-07-4 884863-08-5

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of indolium compds. suitable for optical recording materials)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Asahi Denka Kogyo Kabushiki Kaisha; JP 11-170695 A 1999 CAPLUS
- (2) Asahi Denka Kogyo Kabushiki Kaisha; CN 1438639 A 2003 CAPLUS
- (3) Asahi Denka Kogyo Kabushiki Kaisha; JP 2003231359 A 2003 CAPLUS
- (4) Industrial Technology Research Institute; DE 10249654 A 2003 CAPLUS
- (5) Industrial Technology Research Institute; US 2003202458 A1 2003
- (6) Industrial Technology Research Institute; US 2003203148 A1 2003
- (7) Industrial Technology Research Institute; JP 2003313447 A 2003 CAPLUS
- (8) Industrial Technology Research Institute; JP 2003321450 A 2003 CAPLUS

- (9) Industrial Technology Research Institute; TW 589349 B 2003 CAPLUS
- (10) Industrial Technology Research Institute; TW 593564 B 2003 CAPLUS
- (11) Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo; EP 1170339 A2 2002 CAPLUS
- (12) Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo; JP 2002206061 A 2002 CAPLUS
- (13) Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo; US 200228918 A1 2002
- (14) Matsushita Electric Industrial Co Ltd; JP 11-34489 A 1999 CAPLUS
- (15) Samsung Electronics Co Ltd; KR 00105735 A 2001
- (16) Samsung Electronics Co Ltd; EP 1156084 A2 2001 CAPLUS
- (17) Samsung Electronics Co Ltd; JP 2001342366 A 2001 CAPLUS
- (18) Samsung Electronics Co Ltd; US 20021774 A1 2001

L8 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2006:343129 CAPLUS <<LOGINID::20060705>>  
DN 144:392744  
ED Entered STN: 14 Apr 2006  
TI Cyanine compounds for optical recording materials  
IN Shigeno, Koichi; Yano, Toru  
PA Asahi Denka Co., Ltd., Japan  
SO PCT Int. Appl., 25 pp.  
CODEN: PIXXD2  
DT Patent  
LA Japanese  
CC 41-8 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)  
Section cross-reference(s): 74

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006038464	A1	20060413	WO 2005-JP17375	20050921
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	JP 2006104387	A2	20060420	JP 2004-295111	20041007
PRAI	JP 2004-295111	A	20041007		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2006038464	IPCI	C09B0023-00 [I,A]; B41M0005-26 [I,A]; G11B0007-244 [I,A]; G11B0007-24 [I,C*]; C07D0209-60 [N,A]; C07D0209-00 [N,C*]
	ECLA	C09B023/06
JP 2006104387	IPCI	C09B0023-00 [I,A]; G11B0007-244 [I,A]; G11B0007-24 [I,C*]; B41M0005-26 [I,A]
	FTERM	2H111/EA03; 2H111/EA22; 2H111/EA25; 2H111/EA33; 2H111/FB43; 4H056/CA03; 4H056/CC08; 4H056/CE03; 4H056/CE07; 4H056/DD03; 4H056/FA05; 5D029/JA04

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Cyanine compds. I exhibit decompn. behavior suitable for the optical recording material to be used in \*\*\*optical\*\*\* recording layers of \*\*\*optical\*\*\* recording \*\*\*media\*\*\* for high-speed recording, wherein A, B = optionally substituted benzene or naphthalene ring; X = O, S, Se, CR3R4, or NY; R1 or R2 = II or III then R2 or R1 = C1-30 org. group; R3, R4 = C1-30 org. group; Y = H or C1-30 org. group; Y1 or Y2 = IV then Y2 or Y1 = H or C1-30 org. group; Z = H, halogeno, or cyano; Anm- =

m-valent anion; m = 1 or 2; and p = coeff. capable of keeping the elec. charge neutral. Thus, compd. V 0.003, pyridine 0.06, and acetic anhydride 0.0042 mol were stirred, 0.003 mol compd. VI p-toluenesulfonate was added therein and stirred at 45.degree. for 2.5 h, 0.0045 mol potassium hexafluorophosphate and 10 g methanol were added therein and stirred at 55.degree. for 1 h to give a compd. VII with .lambda.max 596 nm, m.p. 226.5.degree., absorption coeff. 1.26 .times. 10<sup>5</sup> and heat decompn. temp. 234.degree..

ST cyanine compd optical recording material; benzindolium deriv cyanine compd  
IT Dyes  
Optical recording materials  
(cyanine compds. for optical recording materials)

IT Unsaturated compounds  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(cyanines; cyanine compds. for optical recording materials)

IT 882680-28-6P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(cyanine compds. for optical recording materials)

IT \*\*\*17084-13-8\*\*\* , Potassium hexafluorophosphate 882680-25-3  
882680-26-4  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(cyanine compds. for optical recording materials)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
RE  
(1) Asahi Denka Kogyo Kabushiki Kaisha; CN 1438639 A 2003 CAPLUS  
(2) Asahi Denka Kogyo Kabushiki Kaisha; JP 2003231359 A 2003 CAPLUS  
(3) Taiyo Yuden Co Ltd; JP 2004195765 A 2004 CAPLUS  
(4) Tamura Kaken Kabushiki Kaisha; JP 2003171571 A 2003 CAPLUS

L8 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2006:104566 CAPLUS <<LOGINID::20060705>>  
DN 144:160350  
ED Entered STN: 03 Feb 2006  
TI Optical recording material with specified cyanine compound for high speed recording and \*\*\*optical\*\*\* recording \*\*\*medium\*\*\*  
IN Yano, Toru; Shigeno, Koichi  
PA Asahi Denka Co., Ltd., Japan  
SO PCT Int. Appl., 38 pp.  
CODEN: PIXXD2  
DT Patent  
LA Japanese  
IC ICM B41M005-26  
ICS G11B007-24  
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 41

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006011306	A1	20060202	WO 2005-JP10391	20050607
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI JP 2004-222239	A	20040729		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2006011306	ICM	B41M005-26
	ICS	G11B007-24
	IPCI	B41M0005-26 [ICM,7]; G11B0007-24 [ICS,7]

GI

/ Structure 3 in file .gra /

AB An optical recording material for use in an optical recording layer in an  
\*\*\*optical\*\*\* recording \*\*\*medium\*\*\* comprising the \*\*\*optical\*\*\*  
recording layer provided on a substrate. The optical recording material  
is characterized by comprising a cyanine compd. represented by general  
formula I (ring A, ring B = benzene ring, naphthalene ring; X = O, S, Se,  
CR3R4, NY; R1, R2 = II, III, C1-30-org. group; R3, R4 = C1-30-org. group;  
Y, Y1, Y2 = H, C1-30-org. group; Z = H, halogen, cyano; Anm- = m-valent  
anion; m = 1, 2; p = coeff. for maintaining the charge in a neutral state;  
E = C; G = C, O, N; bonding between E and G is double bond or triple bond;  
x, y, z = 0, 1; R5 = H, halo, C1-4-alkyl, C1-4-alkoxy; R6, R7, R8 = H,  
halo, C1-4-alkyl; E' = C; G' = C, O, N; E' together with G' form  
5-membered ring, 6-membered ring, naphthalene ring, etc.).

ST \*\*\*optical\*\*\* recording material rewritable \*\*\*disk\*\*\* cyanine  
compd

IT Cyanine dyes

Erasable \*\*\*optical\*\*\* \*\*\*disks\*\*\*

Optical recording materials

( \*\*\*optical\*\*\* recording material with specified cyanine compd. and  
\*\*\*optical\*\*\* recording \*\*\*medium\*\*\* )

IT 1521-51-3 1971-46-6 4784-77-4, 4-Bromo-2-butene \*\*\*17084-13-8\*\*\* ,  
Potassium hexafluorophosphate 20782-91-6 34902-05-1,  
Bromomethylnaphthalene 53045-71-9 843673-93-8 873868-17-8  
RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of cyanine compd. for optical recording material for high speed  
recording)

IT 873868-13-4P 873868-14-5P 873868-15-6P 873868-18-9P 873868-19-0P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)

(prepn. of cyanine compd. for optical recording material for high speed  
recording)

IT 872005-96-4P 873868-02-1P 873868-04-3P 873868-06-5P 873868-08-7P  
873868-10-1P 873868-12-3P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)

(prepn. of cyanine compd. for optical recording material for high speed  
recording)

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Asahi Denka Kogyo Kabushiki Kaisha; JP 200252829 A 2002
- (2) Asahi Denka Kogyo Kabushiki Kaisha; TW 591646 A 2002 CAPLUS
- (3) Asahi Denka Kogyo Kabushiki Kaisha; CN 1438639 A 2003 CAPLUS
- (4) Asahi Denka Kogyo Kabushiki Kaisha; JP 2003231359 A 2003 CAPLUS
- (5) Asahi Denka Kogyo Kabushiki Kaisha; JP 2003335061 A 2003 CAPLUS
- (6) Asahi Denka Kogyo Kabushiki Kaisha; KR 200368414 A 2003
- (7) Asahi Denka Kogyo Kabushiki Kaisha; JP 200453799 A 2004
- (8) Asahi Denka Kogyo Kabushiki Kaisha; EP 1505125 A1 2005 CAPLUS
- (9) Asahi Denka Kogyo Kabushiki Kaisha; WO 200514722 A1 2005
- (10) Asahi Denka Kogyo Kabushiki Kaisha; US 200531993 A1 2005
- (11) Asahi Denka Kogyo Kabushiki Kaisha; JP 200553875 A 2005
- (12) Eastman Kodak Co; JP 02-124501 A 1990 CAPLUS
- (13) Eastman Kodak Co; EP 358439 A1 1990 CAPLUS
- (14) Eastman Kodak Co; US 4889410 A 1990 CAPLUS
- (15) Sony Corp; EP 1528548 A2 2005 CAPLUS
- (16) Sony Corp; JP 2005132055 A 2005 CAPLUS
- (17) Sony Corp; US 200594548 A1 2005

L8 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:141164 CAPLUS <<LOGINID::20060705>>

DN 142:228814

ED Entered STN: 18 Feb 2005

TI Cyanine compounds for \*\*\*optical\*\*\* recording materials and  
\*\*\*optical\*\*\* recording \*\*\*media\*\*\*

IN Yano, Toru; Shigeno, Koichi; Okada, Mitsuhiro

PA Asahi Denka Co., Ltd., Japan

SO PCT Int. Appl., 30 pp.

CODEN: PIXXD2  
DT Patent  
LA Japanese  
IC ICM C09B023-00  
ICS C07D209-60; B41M005-26; G11B007-24  
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other  
Reprographic Processes)  
Section cross-reference(s): 41

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005014722	A1	20050217	WO 2004-JP10648	20040727
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	JP 2005054150	A2	20050303	JP 2003-289166	20030807
	JP 3708094	B2	20051019		
	EP 1652892	A1	20060503	EP 2004-770959	20040727
	R: AT, DE, FR, GB, LU				
PRAI	JP 2003-289166	A	20030807		
	WO 2004-JP10648	W	20040727		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2005014722	ICM	C09B023-00
	ICS	C07D209-60; B41M005-26; G11B007-24
	IPCI	C09B0023-00 [ICM,7]; C07D0209-60 [ICS,7]; C07D0209-00 [ICS,7,C*]; B41M0005-26 [ICS,7]; G11B0007-24 [ICS,7]
	IPCR	B41M0005-40 [N,A]; B41M0005-40 [N,C*]; C07D0209-00 [I,C*]; C07D0209-60 [I,A]; C09B0023-00 [I,C*]; C09B0023-06 [I,A]
JP 2005054150	ECLA	C07D209/60; C09B023/06
	IPCI	C09B0023-00 [ICM,7]; B41M0005-26 [ICS,7]; C07D0209-60 [ICS,7]; C07D0209-00 [ICS,7,C*]; G11B0007-24 [ICS,7]
	IPCR	B41M0005-40 [N,A]; B41M0005-40 [N,C*]; C07D0209-00 [I,C*]; C07D0209-60 [I,A]; C09B0023-00 [I,C*]; C09B0023-06 [I,A]
	FTERM	2H111/EA03; 2H111/EA22; 2H111/FB43; 4C204/BB05; 4C204/CB13; 4C204/DB08; 4C204/DB13; 4C204/EB10; 4C204/FB03; 4C204/GB11; 4H056/CA01; 4H056/CC02; 4H056/CC08; 4H056/CE03; 4H056/CE06; 4H056/DD03; 5D029/JA04
EP 1652892	IPCI	C09B0023-00 [ICM,7]; C07D0209-60 [ICS,7]; C07D0209-00 [ICS,7,C*]; B41M0005-26 [ICS,7]; G11B0007-24 [ICS,7]
	ECLA	C07D209/60; C09B023/06

OS MARPAT 142:228814

GI

/ Structure 4 in file .gra /

AB The present invention relates novel cyanine compds. I having thermal behavior more favorable for optical recording, \*\*\*optical\*\*\* recording materials, and \*\*\*optical\*\*\* recording \*\*\*media\*\*\*, wherein A, B = (substituted) benzene or naphthalene ring; R1, R2, R3, R4 = benzyl (if adjacent two of R1 to R4 are benzyl, the other groups are C1-4 alkyl or are united to form a 3- to 6-membered ring); Y1, Y2 = independently C1-30 org. group; Anm- = m-valent anion; m = 1 or 2; and p = coeff. keeping the elec. charge neutral. Thus, 158.2 g 2-naphthylhydrazine and 286.0 g 1,1-dibenzylacetone were reacted at 80.degree. for 1 h in the presence of 125 g 35% an aq. hydrochloride soln. to give an indole deriv., 18.7 g of which was mixed with 12.8 g 1-iodo propane and 39.9 g propanol and reacted at 100.degree. for 12 h, 2.71 g the resulting reaction products was



reacted with 2.47 g indole deriv. at 65.degree. for 4 h, and treated with  
 potassium hexafluorophosphate to give a cyanine compd. with thermal  
 decompn. temp. 247.9.degree., which was applied on a titanium  
 compd.-coated polycarbonate to give an \*\*\*optical\*\*\* recording  
 \*\*\*medium\*\*\*, showing good \*\*\*optical\*\*\* recording \*\*\*media\*\*\*  
 properties.  
 ST cyanine compd \*\*\*optical\*\*\* recording material \*\*\*media\*\*\* ;  
 naphthylhydrazine dibenzylacetone reactant cyanine prepn \*\*\*optical\*\*\*  
 recording \*\*\*medium\*\*\*  
 IT Unsaturated compounds  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP  
 (Preparation); USES (Uses)  
 (cyanines; prepn. of cyanine compds. for \*\*\*optical\*\*\* recording  
 materials and \*\*\*optical\*\*\* recording \*\*\*media\*\*\* )  
 IT Optical recording materials  
 (prepn. of cyanine compds. for \*\*\*optical\*\*\* recording materials  
 and \*\*\*optical\*\*\* recording \*\*\*media\*\*\* )  
 IT 843673-87-0P 843673-88-1P 843673-91-6P 843673-96-1P 843673-97-2P  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (intermediate in cyanine compd. prepn.; prepn. of cyanine compds. for  
 \*\*\*optical\*\*\* recording materials and \*\*\*optical\*\*\* recording  
 \*\*\*media\*\*\* )  
 IT 843673-90-5P 843673-95-0P 843673-99-4P  
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP  
 (Preparation); USES (Uses)  
 (prepn. of cyanine compds. for \*\*\*optical\*\*\* recording materials  
 and \*\*\*optical\*\*\* recording \*\*\*media\*\*\* )  
 IT 622-15-1 \*\*\*17084-13-8\*\*\*, Potassium hexafluorophosphate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of cyanine compds. for \*\*\*optical\*\*\* recording materials  
 and \*\*\*optical\*\*\* recording \*\*\*media\*\*\* )  
 IT 74-88-4, Iodomethane, reactions 100-39-0, Benzyl bromide 107-08-4,  
 1-Iodo-propane 2243-57-4 2550-26-7, 4-Phenyl-2-butanone 3506-88-5  
 52263-26-0, N-Methyl-N-(4-chlorophenyl)hydrazine 839676-64-1  
 843673-93-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactant in cyanine compd. prepn.; prepn. of cyanine compds. for  
 \*\*\*optical\*\*\* recording materials and \*\*\*optical\*\*\* recording  
 \*\*\*media\*\*\* )  
 RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE  
 (1) Asahi Denka Kogyo Kabushiki Kaisha; CN 1438639 A 2003 CAPLUS  
 (2) Asahi Denka Kogyo Kabushiki Kaisha; KR 2003068414 A 2003  
 (3) Asahi Denka Kogyo Kabushiki Kaisha; JP 2003231359 A 2003 CAPLUS  
 (4) Asahi Denka Kogyo Kabushiki Kaisha; JP 2003335061 A 2003 CAPLUS  
 (5) Canon Inc; JP 58-21746 A 1983 CAPLUS  
 L8 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2004:909033 CAPLUS <<LOGINID::20060705>>  
 DN 142:306506  
 ED Entered STN: 01 Nov 2004  
 TI Method and dye for improving the addressing signal of \*\*\*optical\*\*\*  
 \*\*\*disk\*\*\*  
 IN Liu, Wenda; Wang, Naizhen; Chen, Wanqun; Lin, Binghuang; Chen, Huizhen;  
 Guo, Xinde  
 PA Laide Technology Co., Ltd., Peop. Rep. China  
 SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 24 pp.  
 CODEN: CNXXEV  
 DT Patent  
 LA Chinese  
 IC ICM G11B007-24  
 ICS C09B029-42  
 CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)  
 FAN.CNT 1  

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1466136	A	20040107	CN 2002-140511	20020705
PRAI CN 2002-140511		20020705		

 CLASS  
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

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CN 1466136 ICM G11B007-24  
ICS C09B029-42  
IPCI G11B0007-24 [ICM,7]; C09B0029-42 [ICS,7]; C09B0029-00  
[ICS,7,C\*]  
IPCR C09B0029-00 [I,C\*]; C09B0029-42 [I,A]; G11B0007-24  
[I,A]; G11B0007-24 [I,C\*]  
OS MARPAT 142:306506  
GI

/ Structure 5 in file .gra /

AB The addressing signal of \*\*\*optical\*\*\* \*\*\*disk\*\*\* is improved by  
formation of a dye layer and a reflective layer on substrate disk. The  
dye layer contains a metal complex of azo compd. I(R1 = C1-6 alkyl, amino,  
alkylamino, tolylamino; R2 = H, OH, halogen, alkoxy, C1-6 alkyl; R3 = H,  
C1-6 alkyl; R4 = H, C1-6 alkyl, halogen; A1 = nitrogen-contg. heterocycle;  
M = Ni, Co, Cu) and a cyanine dye Q2+CH:CHCHQ1A (A = SbF6-, PF6-, BF4-  
ClO4-, CF3SO2-, C2F5SO3-, I-; Q1, Q2 = N-contg. fused heterocycle). The  
reflective layer is Au, Ag, Al, or their alloy.  
ST azo dye \*\*\*optical\*\*\* \*\*\*disk\*\*\*  
IT Azo dyes  
\*\*\*Optical\*\*\* \*\*\*disks\*\*\*  
(method and dye for improving the addressing signal of \*\*\*optical\*\*\*  
\*\*\*disk\*\*\* )  
IT 7429-90-5, Aluminum, uses 7440-22-4, Silver, uses 7440-57-5, Gold,  
uses 123071-50-1 \*\*\*189189-12-6\*\*\* 349542-76-3 560132-86-7  
RL: DEV (Device component use); USES (Uses)  
(method and dye for improving the addressing signal of \*\*\*optical\*\*\*  
\*\*\*disk\*\*\* )

L8 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2004:589117 CAPLUS <<LOGINID::20060705>>  
DN 141:148178  
ED Entered STN: 23 Jul 2004  
TI \*\*\*Optical\*\*\* recording \*\*\*medium\*\*\* dye and \*\*\*optical\*\*\*  
recording \*\*\*medium\*\*\* using thereof  
IN Kuo, Chao-Nan; Hu, Mei-Jung  
PA Taiwan  
SO U.S. Pat. Appl. Publ., 8 pp.  
CODEN: USXXCO  
DT Patent  
LA English  
IC ICM G11B007-24  
INCL 430270210; 430270200; 430945000; 428064800  
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other  
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004142278	A1	20040722	US 2004-755147	20040109
PRAI	TW 2003-92100471	A	20030110		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004142278	ICM	G11B007-24
	INCL	430270210; 430270200; 430945000; 428064800
	IPCI	G11B0007-24 [ICM,7]
	IPCR	G11B0007-24 [I,A]; G11B0007-24 [I,C*]
	NCL	430/270.210
	ECLA	G11B007/247

OS MARPAT 141:148178  
GI

/ Structure 6 in file .gra /

AB An \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* dye is \*\*\*disclosed\*\*\*  
 . The \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* dye comprises the  
 following chem. structure I (A, B = H, halogen, nitrogen-contg. group,  
 alkoxyl group; R1,2 = alkyl group, alkenyl group, aralkyl group,  
 alkoxycarbonyl group, alkoxycarboxyl group, alkoxyl hydroxyl  
 group, alkylamino group, alkylcarbamoyle group, alkylsulfamoyl group,  
 alkylalkoxyl group, alkyl halide group, alkylsulfonyl group, alkylcarboxyl  
 group; and X - = an anion).

ST \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* cyanine dye

IT Cyanine dyes

\*\*\*Optical\*\*\* \*\*\*disks\*\*\*

\*\*\*Optical\*\*\* recording materials

( \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* contg. cyanine dye)

IT \*\*\*726185-74-6P\*\*\* \*\*\*726185-78-0P\*\*\*

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or  
 engineered material use); PREP (Preparation); USES (Uses)

( \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* contg. cyanine dye)

IT \*\*\*189189-12-6\*\*\* \*\*\*726185-79-1\*\*\* \*\*\*726185-81-5\*\*\*

\*\*\*726185-82-6\*\*\* \*\*\*726185-84-8\*\*\* \*\*\*726185-86-0\*\*\*

\*\*\*726185-88-2\*\*\* \*\*\*726185-90-6\*\*\*

RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)

( \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* contg. cyanine dye)

IT \*\*\*17084-13-8\*\*\* , Potassium hexafluorophosphate \*\*\*726185-72-4\*\*\*

\*\*\*726185-75-7\*\*\* \*\*\*726185-76-8\*\*\*

RL: RCT (Reactant); RACT (Reactant or reagent)

( \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* contg. cyanine dye)

L8 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:473142 CAPLUS <<LOGINID::20060705>>

DN 141:44682

ED Entered STN: 11 Jun 2004

TI \*\*\*Optical\*\*\* recording \*\*\*medium\*\*\* containing trimethine cyanine  
 dyes for DVDs

IN Yeh, Sue-Min; Chang, Kao-Ming; Chiu, Wen-Pin; Huang, Chiung-Man

PA CMC Magnetics Corporation, Taiwan

SO U.S. Pat. Appl. Publ., 21 pp.  
 CODEN: USXXCO

DT Patent

LA English

IC ICM B32B003-02

INCL 428064400; 428694000ML

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related  
 Properties)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004109973	A1	20040610	US 2002-309648	20021204
	US 6835433	B2	20041228		
	CN 1505022	A	20040616	CN 2003-141278	20030603
	JP 2004181936	A2	20040702	JP 2003-288297	20030806
PRAI	US 2002-309648	A	20021204		

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2004109973	ICM	B32B003-02
	INCL	428064400; 428694000ML
	IPCI	B32B0003-02 [ICM,7]
	IPCR	B32B0027-00 [I,A]; B32B0027-00 [I,C*]
	NCL	428/817.000
	ECLA	B32B027/00; G11B007/247
CN 1505022	IPCI	G11B0007-24 [ICM,7]; C09B0023-00 [ICS,7]
	IPCR	B32B0027-00 [I,A]; B32B0027-00 [I,C*]
	ECLA	B32B027/00; G11B007/247
JP 2004181936	IPCI	B41M0005-26 [ICM,7]; G11B0007-24 [ICS,7]; C09B0023-00 [ICS,7]
	IPCR	B32B0027-00 [I,A]; B32B0027-00 [I,C*]
	FTERM	2H111/EA03; 2H111/EA12; 2H111/EA22; 2H111/EA25; 2H111/EA43; 2H111/FB43; 2H111/FB60; 4H056/CA01; 4H056/CC02; 4H056/CC08; 4H056/CE03; 4H056/DD03; 4H056/FA06; 5D029/JA04; 5D029/JB47; 5D029/JC03

AB An \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* for recordable DVDs is

provided on a substrate with a recording layer. The recording layer comprises at least one kind of the trimethine-cyanine dyes and an additive, wherein the additive has a larger absorbability at the wavelength of laser beam.

ST \*\*\*optical\*\*\* recording \*\*\*disk\*\*\* DVD trimethine cyanine dye visible absorption

IT Cyanine dyes  
\*\*\*Optical\*\*\* absorption  
\*\*\*Optical\*\*\* \*\*\*disks\*\*\*  
\*\*\*Optical\*\*\* recording  
( \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* contg. trimethine cyanine dye)

IT 145818-06-0 \*\*\*189189-12-6\*\*\* 356062-63-0 701915-94-8  
701915-96-0 701915-98-2  
RL: DEV (Device component use); USES (Uses)  
( \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* contg. trimethine cyanine dye)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE  
(1) Yeh; US 20040043179 A1 2004 CAPLUS

L8 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:1007694 CAPLUS <<LOGINID::20060705>>

DN 140:50346

ED Entered STN: 28 Dec 2003

TI \*\*\*Optical\*\*\* recording \*\*\*medium\*\*\* and method for making the same

IN Liu, Wen-Dar; Wang, Nae-Jen; Chen, Wan-Chun; Lin, Biing-Hwang; Chen, Hui-Jen; Kuo, Hsin-Te

PA Taiwan

SO U.S. Pat. Appl. Publ., 13 pp.  
CODEN: USXXCO

DT Patent

LA English

IC ICM G11B007-24

INCL 430270110; 430270140; 430270160

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003235783	A1	20031225	US 2002-264472	20021003
	TW 594717	B	20040621	TW 2002-91112983	20020612
	JP 2004058658	A2	20040226	JP 2003-156890	20030602
	JP 3682055	B2	20050810		
PRAI	TW 2002-91112983	A	20020612		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2003235783	ICM	G11B007-24
	INCL	430270110; 430270140; 430270160
	IPCI	G11B0007-24 [ICM,7]
	IPCR	G11B0007-26 [N,A]; G11B0007-26 [N,C*]
	NCL	430/270.110
	ECLA	G11B007/246; G11B007/247; G11B007/249
TW 594717	IPCI	G11B0007-24 [ICM,7]
	ECLA	G11B007/246; G11B007/247; G11B007/249
JP 2004058658	IPCI	B41M0005-26 [ICM,7]; G11B0007-24 [ICS,7]; G11B0007-26 [ICS,7]; C09B0023-00 [ICS,7]; C09B0045-00 [ICS,7]
	IPCR	G11B0007-26 [N,A]; G11B0007-26 [N,C*]
	FTERM	2H111/EA40; 2H111/EA41; 2H111/FA01; 2H111/FA12; 2H111/FA14; 2H111/FA31; 2H111/FB42; 2H111/FB43; 2H111/GA07; 4H056/CA01; 4H056/CC02; 4H056/CC08; 4H056/CE03; 4H056/CE06; 4H056/DD03; 4H056/DD19; 4H056/FA06; 5D029/JA04; 5D121/AA01; 5D121/EE22; 5D121/EE28; 5D121/GG16

OS MARPAT 140:50346

GI

AB A method for fabricating an \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* is provided. A dye layer is formed on a molded substrate by spin-coating. A reflection layer is formed on the dye layer by sputtering so that the \*\*\*optical\*\*\* \*\*\*disk\*\*\* has enough reflection rate. The dye layer comprises a cyanine type dye and an azo metal chelate compd. selected from the formula I (M = metal ion; R1 = H, C1-6 alkyl, amino group, alkyl amino group, toluidinyl group; R2 = H, hydroxyl group, halogen atom, ether group, ester group, C1-6 alkyl; R3 = H, C1-6 alkyl; R4 = H, halogen atom, C1-6 alkyl; A1 = heterocyclic deriv. group constituted by carbon atoms and nitrogen atoms).

ST \*\*\*optical\*\*\* recording material \*\*\*disk\*\*\*

IT \*\*\*Optical\*\*\* \*\*\*disks\*\*\*

\*\*\*Optical\*\*\* recording materials  
( \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* and method for making same)

IT Cyanine dyes  
( \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* contg.)

IT 636603-35-5D, complex with Ni  
RL: TEM (Technical or engineered material use); USES (Uses)  
(azo metal chelate compd.; \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* contg.)

IT 123071-50-1 \*\*\*189189-12-6\*\*\* 215370-77-7  
RL: TEM (Technical or engineered material use); USES (Uses)  
(cyanine dye; \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* contg.)

L8 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:471027 CAPLUS <<LOGINID::20060705>>

DN 139:44265

ED Entered STN: 20 Jun 2003

TI Write-once read-many \*\*\*optical\*\*\* recording \*\*\*media\*\*\* and method for recording using the same

IN Tomura, Tatsuya; Sato, Tsutomu; Ueno, Yasunobu; Noguchi, Shu

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G11B007-24

ICS B41M005-26; G11B007-005

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 41

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003173567	A2	20030620	JP 2001-372161	20011206
PRAI JP 2001-372161		20011206		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2003173567	ICM	G11B007-24
	ICS	B41M005-26; G11B007-005
	IPCI	G11B0007-24 [ICM,7]; B41M0005-26 [ICS,7]; G11B0007-005 [ICS,7]; G11B0007-00 [ICS,7,C*]
	IPCR	B41M0005-26 [I,A]; B41M0005-26 [I,C*]; G11B0007-00 [I,C*]; G11B0007-005 [I,A]; G11B0007-24 [I,A]; G11B0007-24 [I,C*]

AB The title recording medium has guide grooves of 0.64-0.8 .mu.m track pitch and a recording layer contg. .gtoreq.2 kinds of org. dyes, and may have a reflective layer and a reflective layer on a substrate having 4-96 T frequency wobbles, wherein the org. dyes have 0-60.degree. C difference of decompn. starting temp. The medium is suitable for using short wavelength semiconductor \*\*\*laser\*\*\* beams and efficiently uses \*\*\*disk\*\*\* space without generating faulty recording nor reading data.

ST \*\*\*optical\*\*\* recording \*\*\*media\*\*\*

IT \*\*\*Optical\*\*\* \*\*\*disks\*\*\*

(DVD-R; write-once read-many \*\*\*optical\*\*\* recording \*\*\*media\*\*\* and method for recording using the same)

IT Dyes

(org.; write-once read-many \*\*\*optical\*\*\* recording \*\*\*media\*\*\*  
and method for recording using the same)  
IT \*\*\*Optical\*\*\* \*\*\*disks\*\*\*  
. (write-once read-many; write-once read-many \*\*\*optical\*\*\* recording  
\*\*\*media\*\*\* and method for recording using the same)  
IT \*\*\*189189-12-6\*\*\* 331980-41-7 464170-18-1 544409-67-8  
544409-68-9 544409-69-0  
RL: TEM (Technical or engineered material use); USES (Uses)  
(org. dye in recording layer)

L8 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2003:221192 CAPLUS <<LOGINID::20060705>>  
DN 138:409264  
ED Entered STN: 21 Mar 2003  
TI Thermal and optical properties of organic dyes for super-resolution  
recordable disks  
AU Chiang, Hao-Hsien; Hsu, Wei-Chih; Tsai, Song-Yeu; Tseng, Mei-Rurng; Hsu,  
Shih-Peng; Hung, Tien-Tsan; Chang, Chin-Jung; Kuo, P. C.  
CS Materials Research Laboratories, Industrial Technology Research Institute,  
Hsinchu, 31015, Taiwan  
SO Japanese Journal of Applied Physics, Part 1: Regular Papers, Short Notes &  
Review Papers (2003), 42(2B), 997-999  
CODEN: JAPNDE  
PB Japan Society of Applied Physics  
DT Journal  
LA English  
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other  
Reprographic Processes)  
AB We have studied the characteristics of super resoln. \*\*\*optical\*\*\*  
\*\*\*disks\*\*\* with an org. dye used for the recording layer. It was  
demonstrated that cyanine dyes with either high decompn. temp. or low  
absorption show good readout durability and high carrier-to-noise ratio  
(CNR).  
ST cyanine dye thermal \*\*\*optical\*\*\* property recordable \*\*\*optical\*\*\*  
\*\*\*disk\*\*\* DVD  
IT Erasable \*\*\*optical\*\*\* \*\*\*disks\*\*\*  
Optical properties  
Thermal decomposition  
(thermal and \*\*\*optical\*\*\* properties of org. dyes for  
super-resoln. recordable disks)  
IT \*\*\*189189-12-6\*\*\* 354540-18-4 440646-02-6 440646-04-8  
RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)  
(dye material; thermal and optical properties of org. dyes for  
super-resoln. recordable disks)  
IT 7440-36-0, Antimony, properties  
RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)  
(mask layer; thermal and optical properties of org. dyes for  
super-resoln. recordable disks)  
IT 109371-84-8, Silicon nitride (SiO-1N0-1)  
RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)  
(protection layer; thermal and optical properties of org. dyes for  
super-resoln. recordable disks)  
IT 7440-57-5, Gold, properties  
RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)  
(reflective layer; thermal and optical properties of org. dyes for  
super-resoln. recordable disks)

RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Dong, X; Proc SPIE 2001, V4085, P162 CAPLUS
- (2) Fuji, H; 12th Symp Phase Change Optical Information Storage (PCOS2000) P27
- (3) Hatakeyama, M; Jpn J Appl Phys 2000, V39, P752 CAPLUS
- (4) Hsu, W; Tech Dig Optical Data Storage Topical Meet 2001, P332
- (5) Kasami, Y; Jpn J Appl Phys 1996, V35, P423 CAPLUS
- (6) Kikukawa, T; Tech Dig Optical Data Storage Topical Meet 2001, P133
- (7) Kuroda, M; Int Symp Optical Memory 1995, We-C1, P23
- (8) Liu, W; Appl Phys Lett 2001, V78, P685 CAPLUS
- (9) Shintani, T; Jpn J Appl Phys 1999, V38, P1656 CAPLUS
- (10) Suzuki, Y; Jpn J Appl Phys 2001, V40, P1588 CAPLUS

- (11) Tominaga, J; Appl Phys Lett 1998, V73, P2078 CAPLUS  
 (12) Tsai, D; Appl Phys Lett 2000, V77, P1413 CAPLUS  
 (13) Tsai, D; Jpn J Appl Phys 2000, V39, P982 CAPLUS  
 (14) Yasuda, K; Jpn J Appl Phys 1993, V32, P5210 CAPLUS

L8 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 2003:150184 CAPLUS <<LOGINID::20060705>>  
 DN 138:204824  
 ED Entered STN: 27 Feb 2003  
 TI Method for selective preparation of aminium and diimonium salts of  
 N,N,N',N'-tetrakis(p-aminophenyl)-p-phenylenediamine as near infrared  
 radiation absorbents  
 IN Sakai, Hitoshi  
 PA Nagase Chemtex Corp., Japan  
 SO Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09K003-00  
 ICS C09B053-00  
 CC 25-4 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003055643	A2	20030226	JP 2001-244813	20010810
PRAI	JP 2001-244813		20010810		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2003055643	ICM	C09K003-00
	ICS	C09B053-00
	IPCI	C09K0003-00 [ICM,7]; C09B0053-00 [ICS,7]
	IPCR	C09B0053-00 [N,A]; C09B0053-00 [N,C*]; C09K0003-00 [I,A]; C09K0003-00 [I,C*]

OS CASREACT 138:204824; MARPAT 138:204824  
 GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Near IR radiation absorbents represented by aminium salts (I; R = H, lower alkyl; X = an anion) and aminium salts (II; R, X = same as above; n = 1,2) are selectively and efficiently prep'd. by oxidn. reaction of N,N,N',N'-tetrakis(p-aminophenyl)-p-phenylenediamine (III; R = same as above) with acid or its salt with peroxodisulfuric acid or its salt optionally in the presence of a Fe(III) complex. Either I or II is selectively obtained by varying the ratio of the acid added or its salt and peroxodisulfuric acid or its salt to III. The compds. I and II are useful as near IR absorbents for thermal insulation films, sun glass, and an \*\*\*optical\*\*\* recording \*\*\*medium\*\*\*. Thus, 1.38 g N,N,N',N'-tetrakis(p-dibutylaminophenyl)-p-phenylenediamine (IV) was dissolved in 15 mL EtOAc, treated with 6 mL MeCN and an soln. of 0.19 g sodium perchlorate and 0.34 g ammonium peroxodisulfate in 6 mL H2O, and stirred at 30.degree. for 3 h wherein the ratio of IV, sodium perchlorate, and ammonium perchlorate was 1:1:1. The reaction mixt. was washed with H2O, concd. under reduced pressure, and treated with n-heptane to give, after filtration of the pptd. crystals and drying, 0.87 g N,N,N',N'-tetrakis(p-dibutylaminophenyl)-p-phenylenediamine aminium monoperchlorate. N,N,N',N'-tetrakis(p-dibutylaminophenyl)-p-phenylenediamine diimonium diperchlorate was obtained by changing the ratio of IV, sodium perchlorate, and ammonium perchlorate to 1:2:2.

ST aminium salt tetrakisaminophenylphenylenediamine prepn near IR radiation absorbent; diimonium salt tetrakisaminophenylphenylenediamine prepn near IR radiation absorbent; oxidn tetrakisaminophenylphenylenediamine peroxodisulfuric acid

IT IR radiation  
 (near-IR; selective prepn. of aminium and diimonium salts of tetrakis(p-aminophenyl)p-phenylenediamine deriv. as near IR radiation absorbents by oxidn. with acid or its salt with peroxodisulfuric acid or its salt)

IT Oxidation  
(selective prepn. of aminium and diimonium salts of  
tetrakis(p-aminophenyl)p-phenylenediamine deriv. as near IR radiation  
absorbents by oxidn. with acid or its salt with peroxodisulfuric acid  
or its salt)

IT 4182-80-3, N,N,N',N'-Tetrakis(p-dibutylaminophenyl)-p-phenylenediamine  
7601-89-0, Sodium perchlorate 13755-29-8, Sodium tetrafluoroborate  
16925-25-0, Sodium hexafluoroantimonate \*\*\*17084-13-8\*\*\* , Potassium  
hexafluorophosphate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(selective prepn. of aminium and diimonium salts of  
tetrakis(p-aminophenyl)p-phenylenediamine deriv. as near IR radiation  
absorbents by oxidn. with acid or its salt with peroxodisulfuric acid  
or its salt)

IT 7727-54-0 85959-68-8 111687-36-6, 1,3-Diaminopropanetetraacetic acid  
iron(III) ammonium salt  
RL: RGT (Reagent); RACT (Reactant or reagent)  
(selective prepn. of aminium and diimonium salts of  
tetrakis(p-aminophenyl)p-phenylenediamine deriv. as near IR radiation  
absorbents by oxidn. with acid or its salt with peroxodisulfuric acid  
or its salt)

IT 5496-71-9P 51302-28-4P 88358-74-1P 88358-75-2P 106152-89-0P  
152340-27-7P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(selective prepn. of aminium and diimonium salts of  
tetrakis(p-aminophenyl)p-phenylenediamine deriv. as near IR radiation  
absorbents by oxidn. with acid or its salt with peroxodisulfuric acid  
or its salt)

L8 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 2002:301690 CAPLUS <<LOGINID::20060705>>  
DN 136:332837  
ED Entered STN: 23 Apr 2002  
TI \*\*\*Optical\*\*\* recording \*\*\*media\*\*\* with excellent light  
resistance and storage stability and optical recording method using them  
IN Tomura, Tatsuya; Azuma, Yasuhiro; Sato, Tsutomu; Sasa, Noboru; Ueno,  
Yasunobu  
PA Ricoh Co., Ltd., Japan  
SO Jpn. Kokai Tokkyo Koho, 19 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM B41M005-26  
ICS C07D487-22; C09B023-00; C09B045-01; C09B047-00; C09B047-04;  
C09B053-02; G11B007-0045; G11B007-24  
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other  
Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002120457	A2	20020423	JP 2000-313993	20001013
PRAI	JP 2000-313993		20001013		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2002120457	ICM	B41M005-26
	ICS	C07D487-22; C09B023-00; C09B045-01; C09B047-00; C09B047-04; C09B053-02; G11B007-0045; G11B007-24
	IPCI	B41M0005-26 [ICM,7]; C07D0487-22 [ICS,7]; C07D0487-00 [ICS,7,C*]; C09B0023-00 [ICS,7]; C09B0045-01 [ICS,7]; C09B0045-00 [ICS,7,C*]; C09B0047-00 [ICS,7]; C09B0047-04 [ICS,7]; C09B0053-02 [ICS,7]; C09B0053-00 [ICS,7,C*]; G11B0007-0045 [ICS,7]; G11B0007-00 [ICS,7,C*]; G11B0007-24 [ICS,7]
	IPCR	B41M0005-26 [I,A]; B41M0005-26 [I,C*]; C07D0487-00 [I,C*]; C07D0487-22 [I,A]; C09B0023-00 [I,A]; C09B0023-00 [I,C*]; C09B0045-00 [I,C*]; C09B0045-01 [I,A]; C09B0047-00 [I,A]; C09B0047-00 [I,C*]; C09B0047-04 [I,A]; C09B0047-04 [I,C*]; C09B0053-00 [I,C*]; C09B0053-02 [I,A]; G11B0007-00 [I,C*]; G11B0007-0045 [I,A]; G11B0007-24 [I,A]; G11B0007-24 [I,C*]



OS MARPAT 136:332837

AB The medium has a substrate, a recording layer, and optionally a reflection layer, a protection layer, and a 2nd substrate, wherein the recording layer contains .gtoreq.1 X- and Y-substituted tetraazaporphyrin compds. (X = H, halo, alkyl, cycloalkyl, Ph, alkoxy, phenyloxy; Y = H, halo, 5-membered heterocyclic group including .gtoreq.1 N bonded to tetraazaporphyrin ring; M = divalent metal, tri- or tetravalent substituted metal, oxidized metal, 2 H atoms) and a metal complex showing light absorption at a wavelength region higher than that of the tetraazaporphyrin compds. and no light absorption in the input/output wavelength region. The method is characterized in that (A) the input wavelength is set at 720-660 nm or (B) the input wavelength is set at 810-770 nm and the output wavelength is set at 810-770 and 720-660 nm. The method enables to use the CD-R input/output system for DVD-R.

ST \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* CDR light resistance; tetraazaporphyrin aminium \*\*\*optical\*\*\* \*\*\*disk\*\*\* storage stability; rewritable \*\*\*optical\*\*\* \*\*\*disk\*\*\* DVD recording method

IT Erasable \*\*\*optical\*\*\* \*\*\*disks\*\*\*  
 \*\*\*Optical\*\*\* recording materials  
 ( \*\*\*optical\*\*\* \*\*\*disks\*\*\* with good light resistance and storage stability for high d. recording)

IT Acrylic polymers, uses  
 RL: DEV (Device component use); USES (Uses)  
 (protection layer; \*\*\*optical\*\*\* \*\*\*disks\*\*\* with good light resistance and storage stability for high d. recording)

IT Cyanine dyes  
 (recording layer; \*\*\*optical\*\*\* \*\*\*disks\*\*\* with good light resistance and storage stability for high d. recording)

IT Polycarbonates, uses  
 RL: DEV (Device component use); USES (Uses)  
 (substrate; \*\*\*optical\*\*\* \*\*\*disks\*\*\* with good light resistance and storage stability for high d. recording)

IT 4263-38-1 53128-42-0 110993-04-9 118368-11-9 162763-45-3  
 \*\*\*189189-12-6\*\*\* 197768-46-0 197925-32-9 203930-35-2  
 412316-36-0 412316-37-1 412912-61-9 412912-62-0 412912-63-1  
 412912-64-2 412912-65-3 412912-66-4 412914-86-4 412914-89-7  
 412914-91-1 412914-93-3  
 RL: DEV (Device component use); USES (Uses)  
 (recording layer; \*\*\*optical\*\*\* \*\*\*disks\*\*\* with good light resistance and storage stability for high d. recording)

IT 7429-90-5, Aluminum, uses 7440-22-4, Silver, uses 7440-50-8, Copper, uses 7440-57-5, Gold, uses  
 RL: DEV (Device component use); USES (Uses)  
 (reflection layer; \*\*\*optical\*\*\* \*\*\*disks\*\*\* with good light resistance and storage stability for high d. recording)

IT 9011-14-7, Poly(methyl methacrylate)  
 RL: DEV (Device component use); USES (Uses)  
 (substrate; \*\*\*optical\*\*\* \*\*\*disks\*\*\* with good light resistance and storage stability for high d. recording)

L8 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:126304 CAPLUS <<LOGINID::20060705>>

DN 136:191769

ED Entered STN: 19 Feb 2002

TI Optical recording material using indocyanine dye

IN Yano, Toru; Takahata, Yoshinori; Oya, Keiji

PA Asahi Denka Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 16 pp.  
 CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41M005-26  
 ICS C09B023-00; G11B007-24

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002052829	A2	20020219	JP 2001-136366	20010507
	TW 591646	B	20040611	TW 2001-90113363	20010601
PRAI	JP 2000-165004	A	20000601		

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2002052829	ICM	B41M005-26
	ICS	C09B023-00; G11B007-24
	IPCI	B41M0005-26 [ICM,7]; C09B0023-00 [ICS,7]; G11B0007-24 [ICS,7]
	IPCR	B41M0005-26 [I,A]; B41M0005-26 [I,C*]; C09B0023-00 [I,A]; C09B0023-00 [I,C*]; G11B0007-24 [I,A]; G11B0007-24 [I,C*]
TW 591646	IPCI	G11B0007-24 [ICM,7]; B41M0005-26 [ICS,7]

OS MARPAT 136:191769  
GI

/ Structure 8 in file .gra /

AB The optical recording material contains an indocyanine dye I [A, B = (substituted) benzene or naphthalene ring; C = (substituted) 3- to 6-membered ring which may contain O, S, or N; R1-2 = C1-4 alkyl which may form a ring; Q = Q1-2; X = H, halo; Y = org. group; Anm- = m-valent anion; m = 1, 2; p= no. to neutralize the mol]. The material is recordable by 620-830 nm laser beam and useful for DVDR and CDR.

ST optical recording material indocyanine dye; CDR DVDR optical recording material

IT \*\*\*Optical\*\*\* ROM \*\*\*disks\*\*\*  
( \*\*\*optical\*\*\* recording material using indocyanine dye)

IT 400622-53-9P 400622-55-1P 400622-58-4P 400622-61-9P 400622-64-2P 400622-67-5P  
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(optical recording material using indocyanine dye)

IT 400622-70-0 400622-73-3  
RL: TEM (Technical or engineered material use); USES (Uses)  
(optical recording material using indocyanine dye)

IT 102-52-3, 1,1,3,3-Tetramethoxypropane 541-28-6, Isoamyl iodide 823-76-7, Acetylcyclohexane 2243-57-4, 2-Naphthylhydrazine 7601-89-0, Sodium perchlorate \*\*\*17084-13-8\*\*\*, Potassium hexafluorophosphate 30834-75-4 36595-99-0, Isoamyl benzenesulfonate 72444-54-3 205178-82-1 226956-53-2 400622-75-5  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of indocyanine dye)

L8 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:842207 CAPLUS <<LOGINID::20060705>>

DN 135:378802

ED Entered STN: 20 Nov 2001

TI Optical recording materials and laser-writable optical recording apparatus

IN Oya, Keiji; Tomita, Atsuo; Ida, Tomonori

PA Asahi Denka Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.  
CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41M005-26  
ICS G11B007-24; C09B023-00

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 41

FAN.CNT 1					
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 2001322354	A2	20011120	JP 2000-143038	20000516
PRAI	JP 2000-143038		20000516		

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2001322354	ICM	B41M005-26
	ICS	G11B007-24; C09B023-00
	IPCI	B41M0005-26 [ICM,7]; G11B0007-24 [ICS,7]; C09B0023-00 [ICS,7]

IPCR B41M0005-26 [I,A]; B41M0005-26 [I,C\*]; C09B0023-00  
[N,A]; C09B0023-00 [N,C\*]; G11B0007-24 [I,A];  
G11B0007-24 [I,C\*]

OS MARPAT 135:378802  
GI

/ Structure 9 in file .gra /

AB The materials comprise I (R1-2 = C1-4 alkyl; Y = H, halogen, C1-10 alkyl which may form ether bond, aryl, C1-4 alkoxy; Anm- = anion of valence m; l = 1-4; m= 1, 2; p = coeff. for neutralization of charge). Optical recording app. having a thin layer of the above stated material is also claimed. Preferably, information is recordable and readable with laser beam of 770-830 nm. The materials are suitable for use in recordable compact disks.

ST optical recording material benzindolenine cyanine dye; compact disk recordable cyanine dye

IT \*\*\*Optical\*\*\* \*\*\*disks\*\*\*  
( \*\*\*laser\*\*\* writable; recordable compact \*\*\*disks\*\*\* with recording layers contg. benzindolenine-contg. cyanine dyes)

IT Cyanine dyes  
\*\*\*Optical\*\*\* recording materials  
(recordable compact \*\*\*disks\*\*\* with recording layers contg. benzindolenine-contg. cyanine dyes)

IT 374553-16-9P 374553-18-1P 374553-19-2P  
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)  
(recordable compact disks with recording layers contg. benzindolenine-contg. cyanine dyes)

IT 102-52-3, 1,1,3,3-Tetramethoxypropane 7601-89-0, Sodium perchlorate 10602-37-6, 1,1,3,3-Tetraethoxy-2-methylpropane \*\*\*17084-13-8\*\*\* , Potassium hexafluorophosphate 374553-21-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(recordable compact disks with recording layers contg. benzindolenine-contg. cyanine dyes)

L8 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:185208 CAPLUS <<LOGINID::20060705>>

DN 134:229761

ED Entered STN: 16 Mar 2001

TI \*\*\*Optical\*\*\* recording \*\*\*medium\*\*\*

IN Kosuda, Atsuko; Shinkai, Masahiro

PA TDK Electronics Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM G11B007-24

ICS G11B007-24; B41M005-26

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 41, 56

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2001067732	A2	20010316	JP 1999-247997	19990901
PRAI	JP 1999-247997		19990901		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2001067732	ICM	G11B007-24
	ICS	G11B007-24; B41M005-26
	IPCI	G11B0007-24 [ICM,7]; G11B0007-24 [ICS,7]; B41M0005-26 [ICS,7]
	IPCR	B41M0005-26 [I,A]; B41M0005-26 [I,C*]; G11B0007-24 [I,A]; G11B0007-24 [I,C*]

AB The \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* has a light-reflecting layer on a recording layer contg. an org. dye, wherein the recording layer contains a cyanine dye as an org. dye and the light-reflecting layer is based on a Ag alloy cong. Cu and Pd .ltoreq.2 at.%, resp. The recording

layer may contain a cyanine dye and a salt-forming dye such as a product between a cationic cyanine dye and an azo metal complex anion. The use of the org. dye enabled recording and reading at 600-680 nm. The use of the Ag'alloy provided corrosion resistance.

ST optical recording material cyanine dye azo metal complex

IT Cyanine dyes

\*\*\*Optical\*\*\* recording materials

( \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* contg. cyanine dye in recording layer)

IT \*\*\*189189-12-6\*\*\* 215370-93-7 283174-52-7 329772-10-3

329772-11-4 329772-12-5

RL: DEV (Device component use); USES (Uses)

( \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* contg. cyanine dye in recording layer)

L8 ANSWER 17 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:865299 CAPLUS <<LOGINID::20060705>>

DN 134:49271

ED Entered STN: 12 Dec 2000

TI Optical recording materials for recordable digital versatile disks

IN Yashiro, Toru

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B41M005-26

ICS G11B007-24

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000343819	A2	20001212	JP 1999-157092	19990603
PRAI JP 1999-157092		19990603		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2000343819	ICM	B41M005-26
	ICS	G11B007-24
	IPCI	B41M0005-26 [ICM,7]; G11B0007-24 [ICS,7]
	IPCR	B41M0005-26 [I,A]; B41M0005-26 [I,C*]; G11B0007-24 [I,A]; G11B0007-24 [I,C*]

OS MARPAT 134:49271

AB The recording layer of the material mainly (A) consists of an org. material giving films of  $2.6 > n > 2.0$  and  $0.08 \text{ .gtoreq.k}$  at 635 nm and an org. material giving films of  $2.8 > n > 2.0$  and  $0.5 > k \text{ .gtoreq. } 0.1$  at 635 nm or (B) consists of an org. material giving films of  $2.4 > n > 1.8$  and  $0.04 \text{ .gtoreq.k}$  at 650 nm and an org. material giving films of  $2.6 > n > 1.8$  and  $0.2 > k \text{ .gtoreq. } 0.05$  at 650 nm. Markush structures for asym. and sym. trimethinecyanine dyes, suitable for use in the recording layers, are given.

ST \*\*\*optical\*\*\* recording \*\*\*disk\*\*\* trimethinecyanine dye; sym trimethinecyanine dye DVD; asym trimethinecyanine dye DVD; recordable digital versatile disk recording layer

IT Cyanine dyes

(recordable digital versatile disks with recording layers contg. asym. and sym. trimethinecyanine dyes)

IT \*\*\*Optical\*\*\* \*\*\*disks\*\*\*

(recordable; recordable digital versatile \*\*\*disks\*\*\* with recording layers contg. asym. and sym. trimethinecyanine dyes)

IT 74276-27-0 \*\*\*189189-12-6\*\*\* 215370-93-7 302345-74-0 312583-14-5

RL: DEV (Device component use); USES (Uses)

(recordable digital versatile disks with recording layers contg. asym. and sym. trimethinecyanine dyes)

L8 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:732915 CAPLUS <<LOGINID::20060705>>

DN 133:303637

ED Entered STN: 17 Oct 2000

TI Substituted indolenine-type cyanine dyes and \*\*\*laser\*\*\* -writable

\*\*\*optical\*\*\* recording \*\*\*media\*\*\* containing them

IN Tominaga, Nobuhide; Ohya, Keiji; Tomita, Atsuo; Yano, Toru  
PA Asahi Denka Kogyo K. K., Japan  
SO Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM B41M005-26  
ICS G11B007-24  
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other  
Reprographic Processes)  
Section cross-reference(s): 41

FAN.CNT 1  
PATENT NO. KIND DATE APPLICATION NO. DATE  
-----  
PI JP 2000289335 A2 20001017 JP 1999-99316 19990406  
PRAI JP 1999-99316 19990406

CLASS  
PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES  
-----  
JP 2000289335 ICM B41M005-26  
ICS G11B007-24  
IPCI B41M0005-26 [ICM,7]; G11B0007-24 [ICS,7]  
IPCR B41M0005-26 [I,A]; B41M0005-26 [I,C\*]; G11B0007-24  
[I,A]; G11B0007-24 [I,C\*]

OS MARPAT 133:303637  
GI

/ Structure 10 in file .gra /

AB The dyes, showing excellent lightfastness, high sensitivity, and good  
soly. to solvents, are represented by I [m = 0-2; n = 1-3; l = 0, 1; R1 =  
C1-4 alkylene; R2 = (substituted) Ph, cyclohexyl, C1-4 alk(en)yl, H; An- =  
anion].

ST laser recording cyanine dye indolenine deriv; lightfastness sensitivity  
indolenine cyanine dye

IT Cyanine dyes  
\*\*\*Optical\*\*\* \*\*\*disks\*\*\*  
\*\*\*Optical\*\*\* recording materials  
( \*\*\*laser\*\*\* -writable \*\*\*optical\*\*\* \*\*\*disk\*\*\* contg.  
substituted indolenine-type cyanine dyes showing high sensitivity)

IT 1798-39-6P  
RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);  
RACT (Reactant or reagent)  
(in prepn. of substituted indolenine-type cyanine dyes for  
\*\*\*laser\*\*\* recording \*\*\*media\*\*\* )

IT 100-16-3, 4-Nitrophenylhydrazine 108-24-7, Acetic acid anhydride  
110-86-1, Pyridine, reactions 565-61-7, 3-Methyl-2-pentanone 607-00-1,  
N,N-Diphenylformamide \*\*\*17084-13-8\*\*\* , Potassium hexafluorophosphate  
100716-80-1, Phenoxyethyl 4-chlorobenzenesulfonate  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(in prepn. of substituted indolenine-type cyanine dyes for  
\*\*\*laser\*\*\* recording \*\*\*media\*\*\* )

IT 300822-78-0 300822-89-3 300822-90-6 300822-91-7  
RL: DEV (Device component use); USES (Uses)  
( \*\*\*laser\*\*\* -writable \*\*\*optical\*\*\* \*\*\*disk\*\*\* contg.  
substituted indolenine-type cyanine dyes showing high sensitivity)

IT 300822-80-4P 300822-82-6P 300822-84-8P 300822-86-0P 300822-88-2P  
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP  
(Preparation); USES (Uses)  
( \*\*\*laser\*\*\* -writable \*\*\*optical\*\*\* \*\*\*disk\*\*\* contg.  
substituted indolenine-type cyanine dyes showing high sensitivity)

L8 ANSWER 19 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2000:467997 CAPLUS <<LOGINID::20060705>>

DN 133:96856

ED Entered STN: 12 Jul 2000

TI Heat mode type \*\*\*optical\*\*\* recording \*\*\*disk\*\*\*

IN Kobe, Emiko; Monden, Atsushi

PA TDK Electronics Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM B41M005-26  
ICS G11B007-24; C09B023-00; C09B045-00; C09B057-10  
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other  
Reprographic Processes)  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2000190642	A2	20000711	JP 1999-289341	19991012
	JP 3441410	B2	20030902		
PRAI	JP 1998-315391	A	19981019		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2000190642	ICM	B41M005-26
	ICS	G11B007-24; C09B023-00; C09B045-00; C09B057-10
	IPCI	B41M0005-26 [ICM,7]; G11B0007-24 [ICS,7]; C09B0023-00 [ICS,7]; C09B0045-00 [ICS,7]; C09B0057-10 [ICS,7]
	IPCR	C09B0045-00 [I,C*]; C09B0045-14 [I,A]; C09B0069-00 [I,C*]; C09B0069-04 [I,A]; G11B0007-24 [I,C*]; G11B0007-247 [I,A]; G11B0007-249 [I,A]

OS MARPAT 133:96856  
GI

/ Structure 11 in file .gra /

AB The invention relates to the \*\*\*optical\*\*\* recording \*\*\*disk\*\*\* which shows excellent recording-readout characteristics at .ltoreq.680 nm, wherein the recording layer contains a chelate compd.(s) of dye I (X1, X2 = active H contg. group; R1, R2 = H, alkyl, aralkyl, aryl, alkenyl; R3-5 = H, alkyl, halo, OH, etc.; R6-9 = H, halo, OH, etc.) and metal. The recording layer may addnl. contain a specified trimethine cyanine dye. The \*\*\*optical\*\*\* recording \*\*\*disk\*\*\* shows excellent light-resistance and recording-readout characteristics.

ST heat mode \*\*\*optical\*\*\* recording \*\*\*disk\*\*\* chelate trimethine cyanine dye

IT \*\*\*Optical\*\*\* \*\*\*disks\*\*\*  
Optical recording materials  
(heat mode type \*\*\*optical\*\*\* recording \*\*\*disk\*\*\* with excellent light-resistance and recording-readout characteristics)

IT 281208-11-5 281208-12-6 281208-13-7 281208-15-9 281208-16-0  
281208-17-1 281208-28-4

RL: DEV (Device component use); USES (Uses)  
(chelate compd. in optical recording layer of heat mode type  
\*\*\*optical\*\*\* recording \*\*\*disk\*\*\* )

IT 153605-82-4P 281208-10-4P  
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)  
(chelate compd. in optical recording layer of heat mode type  
\*\*\*optical\*\*\* recording \*\*\*disk\*\*\* )

IT 99-57-0, 2-Amino-4-nitrophenol 101-18-8, 3-Hydroxydiphenylamine  
1310-73-2, Sodium hydroxide, reactions 7632-00-0, Sodium nitrite  
7646-79-9, Cobalt chloride, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of chelate compd. for heat mode type \*\*\*optical\*\*\*  
recording \*\*\*disk\*\*\* )

IT \*\*\*189189-12-6\*\*\* 215370-93-7  
RL: DEV (Device component use); USES (Uses)  
(trimethine cyanine dye in optical recording layer of heat mode type  
\*\*\*optical\*\*\* recording \*\*\*disk\*\*\* )

L8 ANSWER 20 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 1998:709002 CAPLUS <<LOGINID::20060705>>  
DN 129:349110  
ED Entered STN: 09 Nov 1998  
TI \*\*\*Optical\*\*\* recording \*\*\*media\*\*\*  
IN Tamura, Shinichiro; Oyamada, Mitsuaki  
PA Sony Corporation, Japan

SO PCT Int. Appl., 154 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA Japanese  
 IC ICM B41M005-26  
 ICS G11B007-00  
 CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9847717	A1	19981029	WO 1998-JP1881	19980423
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	JP 2001328350	A2	20011127	JP 1997-106417	19970423
	TW 454184	B	20010911	TW 1998-87106010	19980420
	CA 2287346	AA	19981029	CA 1998-2287346	19980423
	AU 9870808	A1	19981113	AU 1998-70808	19980423
	AU 741970	B2	20011213		
	EP 978392	A1	20000209	EP 1998-917657	19980423
	EP 978392	B1	20060125		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, FI				
	BR 9809774	A	20000620	BR 1998-9774	19980423
	AT 316473	E	20060215	AT 1998-917657	19980423
	MX 9909314	A	20000228	MX 1999-9314	19991011
	US 6727041	B1	20040427	US 2000-403669	20000207
	US 2004214107	A1	20041028	US 2004-793352	20040304
	US 7008753	B2	20060307		
PRAI	JP 1997-106417	A	19970423		
	WO 1998-JP1881	W	19980423		
	US 2000-403669	A1	20000207		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9847717	ICM	B41M005-26
	ICS	G11B007-00
	IPCI	B41M0005-26 [ICM,6]; G11B0007-00 [ICS,6]
	IPCR	G11B0007-24 [I,C*]; G11B0007-247 [I,A]
	ECLA	G11B007/247
JP 2001328350	IPCI	B41M0005-26 [ICM,7]; C09B0023-00 [ICS,7]; G11B0007-24 [ICS,7]; C07D0209-14 [ICS,7]; C07D0209-60 [ICS,7]; C07D0209-00 [ICS,7,C*]; C07D0235-20 [ICS,7]; C07D0235-00 [ICS,7,C*]; C07D0277-64 [ICS,7]; C07D0277-00 [ICS,7,C*]; C07D0293-06 [ICS,7]; C07D0293-00 [ICS,7,C*]; C07D0401-06 [ICS,7]; C07D0401-00 [ICS,7,C*]; C07D0403-06 [ICS,7]; C07D0403-00 [ICS,7,C*]; C07D0413-06 [ICS,7]; C07D0413-00 [ICS,7,C*]; C07D0417-06 [ICS,7]; C07D0417-00 [ICS,7,C*]; C07D0471-04 [ICS,7]; C07D0471-00 [ICS,7,C*]
	IPCR	G11B0007-24 [I,C*]; G11B0007-247 [I,A]
TW 454184	IPCI	G11B0007-24 [ICM,7]
	IPCR	G11B0007-24 [I,C*]; G11B0007-247 [I,A]
CA 2287346	IPCI	B41M0005-26 [ICM,6]; G11B0007-00 [ICS,6]
	IPCR	G11B0007-24 [I,C*]; G11B0007-247 [I,A]
AU 9870808	IPCI	B41M0005-26 [ICM,6]; G11B0007-00 [ICS,6]
	IPCR	G11B0007-24 [I,C*]; G11B0007-247 [I,A]
EP 978392	IPCI	B41M0005-26 [I,C]; G11B0007-00 [I,C]; G11B0007-24 [I,C]; B41M0005-26 [I,A]; G11B0007-00 [I,A]; G11B0007-24 [I,A]
	IPCR	G11B0007-24 [I,C*]; G11B0007-247 [I,A]
	ECLA	G11B007/247
BR 9809774	IPCI	B41M0005-26 [ICM,7]
	IPCR	G11B0007-24 [I,C*]; G11B0007-247 [I,A]
AT 316473	IPCI	B41M0005-26 [ICS,7]; G11B0007-00 [ICS,7]; G11B0007-24 [ICS,7]

MX 9909314 IPCR G11B0007-24 [I,C\*]; G11B0007-247 [I,A]  
 US 6727041 ECLA G11B007/247  
 IPCI B41M0005-26 [ICM,5]; G11B0007-00 [ICS,5]  
 IPCI G11B0007-24 [ICM,7]  
 IPCR G11B0007-24 [I,C\*]; G11B0007-247 [I,A]  
 NCL 430/270.210; 369/288.000; 428/064.800; 430/270.190;  
 430/270.200; 430/945.000  
 ECLA G11B007/247  
 US 2004214107 IPCI G11B0007-24 [I,A]  
 IPCR G11B0007-24 [I,C\*]; G11B0007-247 [I,A]  
 NCL 430/270.210  
 ECLA G11B007/247  
 AB \*\*\*Optical\*\*\* recording \*\*\*media\*\*\* comprises a base (1), a  
 recording layer (2) formed thereon, and a reflecting layer (3) formed on  
 the layer (2), wherein the recording layer (2) contains at least one kind  
 of specified dyes selected from among polymethine dyes having 1 to 4  
 carbon atoms in the main methine chain to secure a sufficient recording  
 sensitivity to a light in the red wavelength region. The \*\*\*optical\*\*\*  
 recording \*\*\*media\*\*\* provided sufficient sensitivity in a short  
 wavelength region in red, resulting a high degree of signal modulation.  
 ST \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* polymethine dye  
 IT Cyanine dyes  
 Optical recording materials  
 (polymethine dye contained in \*\*\*optical\*\*\* recording \*\*\*media\*\*\*  
 )  
 IT 32151-96-5 92479-59-9 167632-34-0 186818-79-1 \*\*\*189189-12-6\*\*\*  
 194938-05-1 214706-17-9 215370-77-7 215370-86-8 215370-93-7  
 215371-09-8 215371-14-5 215371-22-5 215371-28-1  
 RL: DEV (Device component use); USES (Uses)  
 (polymethine dye contained in \*\*\*optical\*\*\* recording \*\*\*media\*\*\*  
 )  
 RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 RE  
 (1) Fuji Photo Film Co Ltd; JP 03281287 A 1991 CAPLUS  
 (2) Matsushita Electric Industrial Co Ltd; JP 02200486 A 1990 CAPLUS  
 (3) Matsushita Electric Industrial Co Ltd; JP 244524 A 1990  
 (4) Mitsubishi Paper Mills Ltd; JP 08337728 A 1996 CAPLUS  
 (5) Ricoh Co Ltd; JP 62268689 A 1987 CAPLUS  
 (6) Tdk Corp; JP 999642 A 1997  
 L8 ANSWER 21 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
 AN 1997:410439 CAPLUS <<LOGINID::20060705>>  
 DN 127:42388  
 ED Entered STN: 03 Jul 1997  
 TI \*\*\*Optical\*\*\* recording \*\*\*disk\*\*\* with recording/readout  
 capabilities at 630-680 and 780 nm  
 IN Shinkai, Masahiro; Kitagawa, Sumiko; Suzuki, Takahiko; Nanba, Noriyoshi  
 PA TDK Electronics Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 42 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM B41M005-26  
 ICS G11B007-24  
 CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)  
 Section cross-reference(s): 41  
 FAN.CNT 3  

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 09099642	A2	19970415	JP 1996-206474	19960717
PRAI JP 1995-212343	A	19950728		

  

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 09099642	ICM	B41M005-26
	ICS	G11B007-24
	IPCI	B41M0005-26 [ICM,6]; G11B0007-24 [ICS,6]

  
 OS MARPAT 127:42388  
 AB The title medium comprises .gtoreq.2 dye-contg. recording layers in which  
 at least 2 layers have different optical consts. each other and at least  
 one of the 2 layers has a thin film absorption FWHM of .ltoreq.170 nm.



The dyes may be selected from specified phthalocyanine dyes for recording/readout at 780 nm and specified cyanine dyes for readout at 630-680 nm.

ST \*\*\*Optical\*\*\* recording \*\*\*disk\*\*\* phthalocyanine cyanine dye  
IT \*\*\*Optical\*\*\* \*\*\*disks\*\*\*  
\*\*\*Optical\*\*\* recording materials  
( \*\*\*optical\*\*\* recording \*\*\*disk\*\*\* with recording/readout capabilities at 630-680 and 780 nm)

IT Cyanine dyes  
RL: DEV (Device component use); USES (Uses)  
(recording layer of \*\*\*optical\*\*\* recording \*\*\*disk\*\*\* contg.)

IT 96-76-4, 2,4-Di-tert-butyl-hydroxybenzene 7758-89-6, Copper chloride  
13491-79-7, 2-tert-Butylcyclohexanol 51762-67-5, 1,2-Dicyano-3-nitrobenzene  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of phthalocyanine dye)

IT 189189-09-1P, 1,2-Dicyano-3-(2,4-tert-butylphenyloxy)benzene  
189189-10-4P, 1,2-Dicyano-3-(2-tert-butylcyclohexyloxy)benzene  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. of phthalocyanine dye)

IT 123071-50-1 129863-07-6 130443-50-4 179128-60-0 184900-51-4  
186415-91-8 186415-93-0 186416-01-3 186416-03-5 186416-07-9  
186416-11-5 186416-32-0 186416-33-1 189101-49-3 189189-03-5  
189189-04-6 189189-05-7 189189-06-8 189189-07-9 189189-08-0  
189189-11-5 \*\*\*189189-12-6\*\*\* 190598-73-3 190598-74-4  
190598-75-5 190598-76-6 190598-77-7 190598-78-8 190598-79-9  
190598-80-2 190598-81-3 190598-83-5 190598-84-6 190598-87-9  
190598-88-0 190598-89-1 190598-90-4 190598-91-5 190598-95-9  
190598-96-0 190598-97-1 190598-99-3 190599-01-0 190599-03-2  
190599-05-4 190599-07-6 190599-08-7 190599-09-8 190599-12-3  
190599-14-5 190599-16-7 190599-17-8 190599-19-0  
RL: DEV (Device component use); USES (Uses)  
(recording layer of \*\*\*optical\*\*\* recording \*\*\*disk\*\*\* contg.)

IT 186415-88-3P 186416-14-8P  
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)  
(recording layer of \*\*\*optical\*\*\* recording \*\*\*disk\*\*\* contg.)

IT 190677-64-6  
RL: DEV (Device component use); USES (Uses)  
(stabilizer; recording layer of \*\*\*optical\*\*\* recording \*\*\*disk\*\*\* contg.)

L8 ANSWER 22 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 1997:328839 CAPLUS <<LOGINID::20060705>>  
DN 126:310467  
ED Entered STN: 23 May 1997  
TI \*\*\*Optical\*\*\* recording \*\*\*medium\*\*\* effecting recording at shorter wavelength region  
IN Shinkai, Masahiro; Kitagawa, Sumiko; Suzuki, Takahiko; Nanba, Noryoshi  
PA Tdk Electronics Co Ltd, Japan  
SO Jpn. Kokai Tokkyo Koho, 33 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM B41M005-26  
ICS C09B067-22; G11B007-24  
CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09066671	A2	19970311	JP 1996-158841	19960530
PRAI JP 1995-175523	A	19950619		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 09066671	ICM	B41M005-26
	ICS	C09B067-22; G11B007-24
	IPCI	B41M0005-26 [ICM,6]; C09B0067-22 [ICS,6]; G11B0007-24 [ICS,6]

AB In the title recording medium having a recording layer and a reflective

layer on a substrate, the recording layer contains a dye A which has the real part n in the range of 1.8-2.8 and the imaginary part k .ltoreq.0.15 at the birefringence 780 nm and the half value width of the thin film absorption spectral .ltoreq.170 nm, and contains a dye B which has the real part n in the range of 1.8-2.8 and the imaginary part k .ltoreq.0.2 at the birefringence 630 or 650 nm. The dye A is a specified phthalocyanine dye and the dye B is a specified trimethine cyanine dye.

ST \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* phthalocyanine dye; trimethine cyanine dye \*\*\*optical\*\*\* recording \*\*\*medium\*\*\*

IT Optical recording materials  
(contg. phthalocyanine dye and trimethine cyanine dye with specified birefringence characteristics)

IT 123071-50-1 129863-07-6 130443-50-4 186415-91-8 186415-93-0  
186416-01-3 186416-11-5 189189-03-5 189189-04-6 189189-05-7  
189189-06-8 189189-07-9 189189-08-0 189189-11-5 \*\*\*189189-12-6\*\*\*  
189189-14-8 189189-15-9 189189-17-1 189189-19-3 189189-21-7  
RL: TEM (Technical or engineered material use); USES (Uses)  
(contained in \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* )

IT 186415-88-3P 186416-14-8P  
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(prepd. and contained in \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* )

IT 189189-09-1P 189189-10-4P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepd. for prepn. of phthalocyanine dye for \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* )

IT 96-76-4, 2,4-Di-tert-butyl hydroxy benzene 13491-79-7, 2-tert-Butyl cyclohexanol 51762-67-5, 1,2-Dicyano-3-nitrobenzene  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of phthalocyanine dye for \*\*\*optical\*\*\* recording \*\*\*medium\*\*\* )

L8 ANSWER 23 OF 23 CAPLUS COPYRIGHT 2006 ACS on STN  
AN 1992:428348 CAPLUS <<LOGINID::20060705>>  
DN 117:28348  
ED Entered STN: 26 Jul 1992  
TI Sulfonium salt catalysts for UV-curable alicyclic epoxy resin compositions as overcoating for \*\*\*optical\*\*\* \*\*\*disks\*\*\*  
IN Endo, Takeshi; Yokoshima, Minoru; Hamatsu, Tomio  
PA Nippon Kayaku Co., Ltd., Japan; Sanshin Chemical Industry Co., Ltd.  
SO Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DT Patent  
LA Japanese  
IC ICM C08G059-20  
ICS C08G059-68; G11B007-24  
CC 38-3 (Plastics Fabrication and Uses)  
Section cross-reference(s): 74  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 04011625	A2	19920116	JP 1990-113994	19900427
PRAI	JP 1990-113994		19900427		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 04011625	ICM	C08G059-20
	ICS	C08G059-68; G11B007-24
	IPCI	C08G0059-20 [ICM,5]; C08G0059-68 [ICS,5]; C08G0059-00 [ICS,5,C*]; G11B0007-24 [ICS,5]

AB The title salts are the (substituted) p-(optionally-alkylated)-hydroxyphenylsulfonium salts (esp. with SbF<sub>6</sub>, PF<sub>6</sub>, AsF<sub>6</sub> and BF<sub>4</sub> groups). A soln. of 100 parts 3,4-epoxycyclohexylmethyl 3,4-epoxycyclohexanecarboxylate and 0.5 part benzyl-4-hydroxyphenylmethylsulfonium hexafluorophosphate was applied on \*\*\*optical\*\*\* \*\*\*disk\*\*\*, and cured with high-pressure Hg lamp at 2000 mJ/cm<sup>2</sup> to give a coating which showed no change after 2000 h at 80.degree. and 90% relative humidity.

ST moisture resistant coating epoxy resin; UV curable epoxy resin coating; sulfonium arom catalyst epoxy coating; alicyclic epoxy coating curing catalyst

IT Epoxy resins, uses  
 RL: USES (Uses)  
 • (alicyclic, coatings for \*\*\*optical\*\*\* \*\*\*disks\*\*\* , UV-curable,  
 • hydroxyarene sulfonium salts as curing catalysts for)

IT Sulfonates  
 RL: CAT (Catalyst use); USES (Uses)  
 (arene, hydroxy, catalysts, for UV-curable alicyclic epoxy resins for  
 \*\*\*optical\*\*\* \*\*\*disk\*\*\* coatings)

IT Coating materials  
 (moisture-resistant, for \*\*\*optical\*\*\* \*\*\*disks\*\*\* , UV-curable  
 alicyclic epoxy resin-based, hydroxyarenesulfonium salts as catalysts  
 for)

IT Recording apparatus  
 ( \*\*\*optical\*\*\* \*\*\*disks\*\*\* , coating for, UV-curable alicyclic  
 epoxy resin-based, hydroxyarenesulfonium salts as catalysts for)

IT Crosslinking catalysts  
 (photochem., for UV-curable alicyclic epoxy resins for \*\*\*optical\*\*\*  
 \*\*\*disk\*\*\* coating, hydroxyarene sulfonium salts as)

IT Acoustic devices  
 (records, compact, coating for, UV-curable alicyclic epoxy resin-based,  
 hydroxyarene sulfonium salts as catalysts for)

IT Phenols, compounds  
 RL: CAT (Catalyst use); USES (Uses)  
 (sulfo, salts, catalysts, for UV-curable alicyclic epoxy resins for  
 \*\*\*optical\*\*\* \*\*\*disk\*\*\* coatings)

IT 125662-43-3 133152-70-2 133152-90-6 134508-14-8 135691-30-4  
 141545-63-3 141896-03-9 141896-04-0 141914-89-8 141914-91-2  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalysts, for UV-curable alicyclic epoxy resins for \*\*\*optical\*\*\*  
 \*\*\*disk\*\*\* coatings)

IT 25085-98-7, 3,4-Epoxy cyclohexylmethyl 3,4-epoxycyclohexanecarboxylate  
 polymer 53895-44-6 142198-81-0  
 RL: USES (Uses)  
 (coatings for \*\*\*optical\*\*\* \*\*\*disks\*\*\* , UV-curable, arene  
 sulfonium salts as catalyst for)

IT 108965-52-2 132733-08-5 133152-68-8 133152-71-3 141545-62-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with metal fluoride)

IT 16893-92-8 \*\*\*17084-13-8\*\*\* , Potassium hexafluorophosphate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with sulfonium compds.)

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(FILE 'HOME' ENTERED AT 08:21:49 ON 05 JUL 2006)

FILE 'REGISTRY' ENTERED AT 08:22:02 ON 05 JUL 2006

L1 STRUCTURE UPLOADED

L2 STRUCTURE UPLOADED

FILE 'CAPLUS' ENTERED AT 08:22:50 ON 05 JUL 2006

L3 1 S US 2004-0142278/PN

FILE 'REGISTRY' ENTERED AT 08:23:22 ON 05 JUL 2006

FILE 'CAPLUS' ENTERED AT 08:23:35 ON 05 JUL 2006

L4 TRA L3 1- RN : 14 TERMS

FILE 'REGISTRY' ENTERED AT 08:23:35 ON 05 JUL 2006

L5 14 SEA L4

FILE 'CAPLUS' ENTERED AT 08:23:42 ON 05 JUL 2006

L6 738 S L5

L7 87270 S (OPTICAL OR LASER OR INFORMATION) (5A) (MED? OR DISK? OR DISC?)

L8 23 S L6 AND L7

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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	85.64	100.89

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

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